



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS MILITARY AIRLIFT COMMAND
SCOTT AIR FORCE BASE, ILLINOIS 62225-5001



REPLY TO
ATTN OF: DEEV

EPA Region 5 Records Ctr.



356917

20 JUL 1988

SUBJECT Response to Comments on the RI/FS Stage 1 Plans for Scott AFB IRP

TO AFRCE-CR/ROV HQ MAC/SGPB 375 ABG/DE

1. Attached are the responses to comments on the Stage 1 RI/FS Work Plan and Quality Assurance Project Plan Comments for the Scott IRP. These responses were provided by the OEHL Technical Program Manager and reflect comments received from AFRCE-CR/ROV, 375 ABG/SGPB, 375 ABG/DEEV, HQ MAC/SGPB, and EPA Region 5.

2. Please review the responses to your comments. If you have any questions please contact our POC, Mr Edwards, AUTOVON 576-5764.

FOR THE COMMANDER IN CHIEF

SIGNED

ANDREW A. ALLAN
Director, Engineering and Construction
DCS/Engineering and Services

1 Atch
Response to Comments

cc: 375 ABG/SGPB
EPA, Region 5

RECEIVED

JUL 26 1988

ENVIRONMENTAL REVIEW BRANCH
PLANNING & MANAGEMENT DIV.



Review Comments/Responses to the IRP Stage 1 Work Plan and Quality Assurance Project Plan for Scott Air Force Base

1. Reviewer: AFRCE/ROV

A. Work Plan Comments/Responses

(1) Pg 1-5, section 1.3.2, Para 2, line 3: Should read Quality Assurance/Quality Control (QA/QC).

(2) Pg 2-3: Add a North arrow to figure 2-2.

(3) Pg 2-5, Section 2.1.2.1, para 4, line 3: Change Defense Property Disposal Office to Defense Reutilization and Marketing Office.

(4) Pg 2-7, last line: Water from half of these separator drains to the storm sewer and the remainder drains to the sanitary sewer.

(5) Pg 2-9, line 3: Change DPDO to DRMO.

RESPONSE: Comments 1-5 incorporated.

(6) Pg 3-23, para 3.3.2.4: Are there abandoned wells on Scott AFB that need to be closed out?

RESPONSE: No previous IRP associated wells have been drilled on Scott AFB. Any other abandoned wells should be closed out by the Base.

(7) Pg 4-12, Table 4-5, 2nd column: Should read "Depth to Bedrock."

(8) Pg 4-14, line 2: Change CRF to CFR.

(9) Pg 5-2, Section 5.2: Background soil and water sampling needs to be part of the site investigation.

(10) Pg 5-2, second to last line: The word mount should be amount.

RESPONSE: Comments 7-10 incorporated

(11) Pg 5-4: Is the north arrow good for both drawings?

RESPONSE: North arrow is applicable to both drawings.

(12) Add a north arrow on 5-8.

RESPONSE: Comment 12 incorporated

(13) Pg 5-27, para 2: Question the logic of drilling through the heart of the landfill.

RESPONSE: Work Plan modified; borings will be placed only around the perimeter of the landfill. Drilling will not be done within the landfill.



(14) Pg 5-30, para 5, last sentence: If necessary a protective steel casing and/or other protective measures such as a concrete pad with marker posts around the monitoring wells, will be ...

(15) Pg 5-39, line 3: Change O&M to operation and maintenance.

(16) Pg 5-39, line 16: Recommend deleting discussion of temporary remedies.

(17) Pg 5-47, para 1, 2nd sentence: Rewrite the sentence as " It is anticipated some of the liquid wastes deposited on the burn area have seeped into the ground."

RESPONSE: Comments 14-17 incorporated.

(18) You may want to include tanks abandoned prior to 1984 in the evaluation.

RESPONSE: The sites to be investigated were decided upon by research conducted in Phase 1 of the IRP. The selection of sites was discussed at the site assessment meeting and was agreed upon by all personnel attending.

B. Quality Assurance Project Plan Comments/Responses.

(1) Need to incorporate superfund, NCP, terminologies as much as possible.

RESPONSE: Comment 1 incorporated.

(2) We should offer to split samples with the regulators.

RESPONSE: The regulators have not expressed any interest in split samples.

(3) Pg 1-42, sec. 1.12.2: Discussions on storage/disposal of wastes generated from field equipment maintenance should be included in this section.

RESPONSE: Disposal of wastes from field equipment maintenance is discussed in sec. 2.4.5.

(4) Pg 2-2, sec. 2.2.1: Should have a monitoring well location map established in coordination with the Base Comprehensive Plan.

RESPONSE: Incorporated.

(5) Pg 2-3, sec. 2.2.1: Add one subsection to discuss the storage/disposal of drill cuttings and rinsate generated from equipment decontamination. Procedures of decontamination shall also be specified.

RESPONSE: Discussed in sec. 2.4.5.

(6) Pg 2-8: Recently, we have learned that the Illinois



Environmental Protection Agency (IEPA) has a policy against the use of PVC materials for monitoring wells that will be used to collect samples for analysis of organics at low concentrations. We strongly recommend that stainless steel or teflon casings be utilized.

RESPONSE: IEPA had no comments on the Work Plan or the QAPP. It is a general policy at OEHL to use PVC well materials in remedial investigations. These are not long term monitoring wells, they are only required for the extent of the RI/FS.

Prior to collecting a sample, three well volumes of water are purged from a well. The contact time for sample water with the well material is usually only a few minutes. We do not feel this has any significant effect on the quality of the sample.

(7) PG 2-9: Procedures that meet federal and state requirements for closure of monitoring wells shall be provided.

RESPONSE: Well abandonment methods consistent with federal and state requirements will be recommended in the Stage 1 RI/FS Report. Actual closure of the wells is not part of the Stage 1 project.

2. Reviewer: USAF Med Ctr/SGPB, Scott AFB

A. Work Plan, QAPP, and Health and Safety Plan Comments/Responses.

(1) Medical Center Personnel were not shown to have been included in the preliminary assessment site inspection.

(2) While discussing the mission/organization, the Consolidated Aircraft Maintenance Squadron (CAMS) was identified as part of the Air Base Group (ABG) rather than the Wing. Also, the local branch of the Defense Reutilization and Marketing Office (DRMO) which disposes of hazardous waste was not mentioned.

RESPONSE: Comments 1 and 2 are incorporated.

(3) Terminology needs to be defined. Both documents start using Air Force Installation Restoration Program (IRP) terminology and switch to Environmental Protection Agency (EPA) language without showing a comparison.

RESPONSE: The IRP is now conducted to be parallel with the National Contingency Plan's (NCP's) Remedial Investigation/Feasibility Study (RI/FS) process. NCP terminology is used where it is appropriate. The introduction text has been changed to reflect this.

(4) Please check the IRP long range objectives. "Develop and evaluate remedial actions for sites if necessary and feasible" sounds like bad press. Who determines what is feasible?

RESPONSE: The feasibility study is part of the RI/FS process. The feasibility of a remedial action is decided upon by the Air Force in conjunction with applicable regulatory agencies

(5) Work Plan Table 2-1 is incomplete it only includes data from Scott AFB in St. Louis.

RESPONSE: Table 2-1 has been altered. Information on industrial waste management is presented in the Phase 1 report and is not required in this table.

(6) Both Defense Property Disposal Office (DPDO) and DRMO are used with no mention that they are the same organization.

(7) At one point "Gamma Ray Logs" are mentioned. If this involves bringing a radioactive source on base our office must be notified and approve the operation.

(8) Work Plan Para. 5.2.4.2 implies that Scott AFB is on the National Priority List which it is not.

(9) Sample Chain of Custody. Environmental Resources Management (ERM) says their personnel will take samples, but the Weston Analytics Quality Assurance Plan says Weston personnel will take the samples. This needs to be redefined as to who will do the work.

RESPONSE: Comments 6-9 incorporated.

(10) The Safety and Health Plan (SHP), para. 3.1, Site Control, potentially contaminated media will be covered with plastic before personnel leave the site. I suggest identifying signs be placed on this material.

RESPONSE: All drill cuttings and soils suspected to be contaminated will be placed in 55 gal drums and labeled.

(11) Potentially contaminated soil borings are to be drummed and disposed of at Base expense. No control has been suggested for run off from decontamination operations.

RESPONSE: Decontamination procedures will be conducted in such a way that solvents either evaporate during use or are recovered. Steam cleaning will be conducted in an area where run off can be directed to a sanitary sewer, if possible, through an oil/water separator.

(12) The QAPP should include why protocols were chosen and either contain or directly reference these protocols in para 1.2.2, Site Specific Work Plans.

RESPONSE: All protocols were selected to analyze samples for the most probable contaminants which may be present at each site. The protocols were discussed and agreed upon at the Site Assessment Meeting. This will be discussed in para.1.2.2.

(13) Work Plan para. 3.5.2, Land Use, left out Scott Lake as a recreational facility.

(14) The emergency contacts on the SHP need to be updated.

RESPONSE: Comments 13 & 14 incorporated.



(15) Sampling under Building 1680 may not be necessary. Our office took fifty two samples on 2 September 1987.

RESPONSE: Additional sampling will be conducted to further confirm and define the contamination at bldg 1680. The results from the 2 Sept 87 samples will be used to direct and focus this sampling effort.

3. Reviewer: Scott AFB Environmental Coordinator

A. Work Plan Comments/Responses

(1) Defense Property Disposal Office (DPDO) is now Defense Reutilization and Marketing Office (DRMO). The Plan needs to state that change.

(2) Figure 2-3 does not specify what organizations are generation and/or accumulation points.

RESPONSE: Comments 1 & 2 incorporated.

(3) Page 4-17, the data to be provided on magnetic media must be compatible with the Air Force Work Information Management System (WIMS), which uses the WANG computer system.

RESPONSE: Data will be provided on media compatible with the IRP Information Management System. This will be available to the Base for extraction to the WIMS on request. IRP data is not routinely presented on magnetic media compatible with the WIMS.

(4) Page 6-1, Will the BCE be provided copies of the reports?

RESPONSE: Copies of all reports will be forwarded to 375 ABG/DEEV through HQ MAC/DEEV.

B. Quality Assurance Project Plan Comments/Responses.

(1) It is not clear how closely ERM and its subcontractors will be working with Base Civil Engineering. Both documents state what is required from CE, but not how they are included in the information loop.

RESPONSE: ERM will be dealing directly with BCE during the field work at Scott AFB. Copies of all Plans, R&D Status Reports, and Final Reports will be provided to BCE to keep the project status updated.



4. Reviewer: HQMAC/SGPB

A. Work Plan comments/responses

1. Page 1-1, para 1.1.1., lines 8-9:

Is this correct that the program was designated as the DoD Superfund Program? Shouldn't it be IRP? (May be the "equivalent" of Superfund, but not a formal title of program.)

Response: Reference to "DoD Superfund Program" deleted.

2. Page 2-1, para 2.1.1.2., line 7:

Clarify "slow close" or use improved wording.

3. Page 2-5, last line, and page 2-7, first line:

Change to read: "...sanitary sewage system and storm drainage system." Do not use the antiquated term "storm sewer" as this refers to combined sewage and storm water drains which are no longer used on Air Force bases.

Response: Comments 2 & 3 incorporated

4. Page 2-6:

Show where the footnotes 1 and 2 apply.

Response: Table altered; footnotes no longer included.

5. Page 2-6, Waste Accumulation and Storage Areas, second paragraph:

It is meaningless to show dots on the map without identifying which shops they are. Show identification on map in an inset block. Also, only 15 generation points (not 17) are displayed, plus 2 accumulation points only.

Only 11 points are shown which accumulate waste, not 15.

Facilities 540 and 59 are not clearly shown.

Show location of the six tanks, the Aqua Yard, the auto hobby shop, and Building 45 clearly on Fig 2-3, since they are discussed in text.

If possible without cluttering, show locations of the 8 oil-water separators mentioned.

Response: Text on page 2-6 and Fig 2-3 altered to incorporate comments.

6. Page 2-9, first line:

Change "storm sewer" to read "storm drainage system".

Response: Comment #6 incorporated.

7. Page 2-9, Fuels Management:

Line 3 - Can we say: "...are confirmed to be empty." Otherwise, it sounds like we don't have much confidence that they are empty!

Line 12 - Change to read: "...level tests" (lower case?).

Line 16 - Change to read: "...storm drainage system or sanitary sewage system,..."

Response: Reference to empty tanks deleted. Lines 12 and 16 corrected.

8. Page 2-10:

Same comment re storm sewers.

Response: incorporated

9. Page 2-11:

Line 1 - Typo: "back".

Last sentence - Revise; delete "either" and change "random" to "various."

I don't believe rinsewaters are disposed in the manner described. We should confirm that they are either sprayed on peripheral areas or rinsed and disposed in sanitary sewers. It is not good practice and no reason exists to "run out" the rinsate along fence lines or into storm drainage system.

Response: Line 1 corrected. Reference to rinsewater disposal deleted.

10. Page 2-11, Fire Protection Training:

Suggest a reference to refer to Fig 2-4 for locations. This would help the reader in orientation, which otherwise does not occur until page 2-16.

11. Page 2-13, line 2.

Spell out AFFF. Are the last two words "and foam" duplication of AFFF?

12. Page 2-13, para 2.1.2.2.:

Sub-item 4 - Change to read: "Sanitary Sewage System and Sewage Treatment Plant" for consistency.

Sub-item 6 - Change to read: "Storm Drainage System."

13. Page 2-13, Landfill, line 4:

Change "wastewater" to "sewage".

14. Page 2-14:



Line 11 - Change "wastewater" to "sewage"

Line 15 - Change to read "...and sewage treatment plant sludge..."

15. Page 2-16:

Line 4 - Change to: Storm Drainage System.

Lines 6 & 7 - Change to: "...storm drains, and drainage ditches and culverts".

Third line from bottom - Change to: "II/IV-A, Stage 1..."

16. Page 2-18:

Title should be "SITES..."

17 Page 2-19:

Last column, 4th entry, line 3 - Change to "...through storm drainage system..."

Last column, last entry, line 2 - Add ", " after "only".

18. Page 3-11, last line:

Typo: "base".

19. Page 3-13, para 3.3., line 5:

Change to read: "...hydrologist contacted..."

Response: Comments 10-19 incorporated.

20. Page 3-13, para 3.3.1.1., line 9:

Comment: It is not clear, but I presume that Little Silver Creek is an upstream tributary of Silver Creek, since the confluence is North of the base. Suggest rephrase, for example: "...at the confluence with Little Silver Creek, a tributary, which is located..." However, it is odd to show the watershed acreage at this point upstream of the base, which does not cover Scott AFB.

Response: Wording of line 9 changed.

21. Page 3-16, line 2:

Clarify use of word "accessed."

22. Page 3-20, para 3.3.2.2., line 1:

Typo: "and".

23. Page 3-24

Line 4 - Add "than" after "more".

Last line - Add "officers" after "2417".

24. Page 3-26, last column of Table 3-4:

Define "SWL"; Typo: "3.11" should be "3-11" in two places; Spelling: "unconfirmed" in Note.

Response: Comments 21-24 incorporated.

25. Page 3-27:

Define "EYR" and check questionable quantities shown on last line "43...43, 75, 35".

Response: Reference deleted. Unnecessary information.

26. Page 4-5, second column:

Opposite "Air", Line 3 - Change "sewer drains" to "sewers or drains."

Opposite "Direct Contact", line 3 - Change to read "sanitary sewers or storm drains."

27. Page 4-6:

Do not extend line under "Migration Pathways" beyond "Air". "Receptors" is not to be included under this grouping. Center "Migration Pathways" over the three applicable columns.

Under Information Source, line 12, change "Oceanic" to "Oceanographic."

Line 28 - Spelling: "Attorney".

Line 37 - Define or spell out "FIT/TAT Reports".

28. Page 4-7:

Line 2, last word - "individual's".

Line 22 - Add ", " after "media".

29. Page 4-8, lines 8-9:

Change " - Addressing Chemical Specific" to read ", which addresses chemical - specific."

30. Page 4-9, line 5:

Change "becomes" to "become".

31. Page 4-11:



Line 4 - Change "on-site" to "on site".

Line 15 - Change "on-site" to "on site".

Suggest delete " (ARARs)" from line 18 and insert "(ARARs)" in the heading at the end of line 10.

32. Page 4-13:

Line 3 - Add "," after "ARARs".

Line 8 - Add "of" after "use".

Line 11 - Add "-" after "Water".

Line 19 - Change "-:" to ":".

Line 20 - Change "or" to "of".

Line 24 - First word should be "Hygienists".

Last line - Delete "Guidance".

33. Page 4-14:

First line - Change "or" to "and".

Line 22 - Change "on-site" to "on site".

34. Page 4-15:

Title - Change "ARAR's" to "ARARs".

Last column, line 13 - Spelling: "included".

Last column, lines 23-24 - Change "avoid the extent possible" to "avoid, to the extent possible,".

Last column, line 34 - Add "to make" after "and".

35. Page 4-16, para 4.6., line 8:

Change "insures" to ensures".

36. Page 4-17:

Line 2 and line 11 - Change "IRPIMS" to "IRP IMS".

Line 6 - Should "archive" be "achieve", to be consistent with words in line 3?

Response: Comments 26-36 incorporated.

37. Page 5-1, para 5.1:

Should this be "Phase II/IV-A, Stage 1"? Clarify what Stage 1 consists of, as opposed to Stages 2 and 3. Should this be RI/FS instead?

Response: RI/FS is now the correct terminology and is incorporated in the Plans.

38. Page 5-2, para 5.2.1.2.:

First line - Typo: "amount".

Second line - Clarify whether Phase II/IV-A or RI/FS should be used.

Response: Incorporated

39. Page 5-14:

Heading for 3rd column - Change from "SURFACE to "SURFACE
TYPE" WATER"

Heading for last column - should be configured vertically for consistency with heading for surface water, i.e. "GROUND
WATER"

Response: Table 5-3 deleted. Information incorporated into a new table.

40. Page 5-21, para 5.2.2.3.: Add a Shiloh Township point of contact.

41. Page 4-23, Electromagnetic Surveys:

Add "to detect locations of buried drums" as an objective of the surveys. This would aid in subsequent placement of boreholes and interpretation of soil gas surveys.

42. Page 5-24, para 5.2.2.5., line 1: Change "infield" to "in-field".

Response: Comments 40-42 incorporated.

43. Page 5-28, Table 5-8:

Why is Landfill not included? This table should match with info on Table 5-2. Also show shallow surface samples at Bldg 1680 to be consistent. Otherwise, change title to "Summary of Subsurface Soil Borings".

44. The number of borings (25) on Table 5-8 should match the number stated on page 5-26, line 3.

Explain the column entitle "Sampling Boring".

Response: Table 5-8 corrected.

45. Page 5-29, Table 5-9:

The number of monitoring wells at the landfill (13) does not match the



number shown on Fig 5-1 (14). The entry "3 deep wells" is not complete, since the depth of the other wells is not described.

The entire presentation of wells and borings could be tremendously improved for better readability. The reader is forced to try to assume what is being counted, i.e. monitor wells (shallow), monitor wells (deep), and perhaps the soil borings (4) in FPTA 2 which are evidently counted as monitoring wells in Table 5-9.

Response: Table 5-9 corrected. 13 borings at the landfill site will be converted to monitoring wells.

46. Page 5-32, para 5.2.2.11., last sub-paragraph:

47. Page 5-34:

Line 7 - First word, change to "ensure".

Line 9 - Change "include" to "includes".

48. Page 5-35, sub-para 5., second line:

Typo: "no-action".

49. Page 5-36, 2nd para, line 4:

Change "migrates" to "migration".

50. Page 5-37, para 5.2.4.4., line 4:

Add ", " after "cost".

Response: Comments 46-50 incorporated.

51. Page 5-40:

Line 2 - Change to "alternatives".

Para 5.2.4.5., line 9 - Reference to Section 5.2.3.4. is incorrect.

52. Page 5-43, para 5.2.4.8., last line:

Spelling: "baseline".

53. Page 5-45:

Line 3 - Change "wastewater" to "sewage".

Line 13 - Number of Water Table Wells (10) does not match number shown in Fig 5-1 (11).

54. Page 5-47:

Entry for Water Table Wells for FPTA 2 indicates 4 wells; however, Fig 5-1



only shows 2. It would be helpful to present the data in a less confusing manner, perhaps pointing out which of the landfill monitoring wells are also used to provide data to assess FPTA 2.

Line 16 - Typo: "...indicated in..."

55. Page 5-48, line 7:

Spelling: "indicated".

56. Page 5-50, para 5.3.7.:

Line 2 - Numbers of tanks 8552 and 8554 do not match numbers in Fig 5-6, i.e. 8852 and 8854. Which are correct?

Line 3 - Change "removal" to "removed".

Last sentence - Change "analyzed" to "analyses" and "indicates" to "indicate".

57. Page 6-1, para 6.0., line 7:

Change "USAF/OEHL" to "USAF OEHL".

58. Page 6-2, line 2:

Change "USAF/OEHL" to "USAF OEHL".

59. Page 7-2, Fig 7-1:

Should the Title be "IRP RI/FS..."?

Reference:

4th entry - Change "USAF/OEHL" to "USAF OEHL".

7th entry - Spelling: "Survey".

Response: Comments 51-59 incorporated.

B. QAPP and Health and Safety Plan Comments/Responses.

1. List of Tables, Item 7, last line:

Change "Bases" to "Base".

2. Page 1-27, line 21:

Change "insure" to "ensure".

3. Page 1-27, para 1.8., last sentence:

Confusing; rewrite.

4. Page 1-27, para 1.9.:

First word - change to "Data".

First line - Change "insure" to "ensure".

Response: Comments 1-4 incorporated.

5. Page 2-2, para 2.2.1. last paragraph, lines 7-10:

Also address contaminated liquids as well as soil cuttings. Such liquids should be containerized and tested as well as soil cuttings.

Response: Contaminated liquids are not generated during drilling procedures.

6. Page 2-5, lines 18 and 24:

Change "insure" to "ensure".

Response: Incorporated.

7. Page 2-6, Fig 11:

The space between the well casing and guard posts should be concrete also to prevent weed growth and an unsightly appearance.

Response: Sufficient space is left between the well casing and the guard post for the operation of a weed trimmer.

8. Page 2-8, last line:

Change "lie" to "lid".

9. Page 2-15, Title:

Change "Based" to "Base".

10. Page 2-17, line 6:

Change "based" to "base".

Response: Comments 8, 9 and 10 incorporated.

11. Page 3-1:

Provide a Table of Contents for Atch 1, Laboratory Quality Assurance Plan. Show 1.0 and 2.0 as "Not Used".

Provide page numbers for all pages consistently.

Review the format for the 2nd bound volume and provide an overall Table



of Contents for the five separate sections which are separated by blue dividers. Suggest label the 2nd bound volume as Vol II, and identify it as containing both the QAPP and the Health and Safety Plan.

Response: Table of contents and page numbers incorporated into Lab QA Plan. The QAPP and the Health and Safety Plan are now separate documents.

12. Page 3-13(?) or 4-1 (?), para 4.0., first sentence:

Is statement incorrect? Are all samples to be collected by Weston personnel (or ERM field sampling personnel)?

Response: ERM personnel will collect the samples; text corrected.

13. Atch 3:

Is it really necessary to include the instruction manuals in the bound volume? Will a reference to the instruction manuals suffice?

Response: Manuals have been removed.

14. Atch 4, Section 2, Page 2-1, 2nd para, line 3: Change "ERP" to "IRP"

15. Page 3-6 Item 6: Second sentence is not realistic. Suggest change to read "Personnel involved in project work must prevent incompatible uses of prescribed drugs and alcoholic beverages." or similar wording.

Response: Comments 14 & 15 incorporated.

16. Page 3-7, Item 14: Change to read "Extra cartridges for air-purifying respirators in use will be readily available and will be changed as often as necessary to provide good respiratory protection." Rationale is that many cartridges have a longer service life, particularly if exposures are minimal.

Response: Since it is impossible to estimate the exposure of respirator cartridges at a hazardous waste site, they are changed out daily. The contractor has Health & Safety procedures which are its own policies and must be adhered to.

17. Page 4-2, para 2, Toxic Gas: Add "However, project personnel must constantly be alert for unanticipated toxic materials, particularly in landfill explorations, and report suspicious occurrences to the Site Safety Officer."

18. Page 4-3:

First line: Change or delete "(PEL)". Rationale is that PEL represents the permissible exposure limit whereas action level is normally set at some lower level than the PEL. It is OK to set the action level at some fraction of the PEL or even at the PEL, but inappropriate to define the action level as "(PEL)".

19. Line 10: Change "...a conservative PEL has been set..." to read "...an action level has been set..."



20. Line 11: Spell out "permissible exposure limit (PEL)".

21. Line 13: Typo: "is available".

22. Line 14 & 15: Change "...PEL and/or action levels..." to read "...action levels...".

23. Page 4-3, Organic Vapors:

Line 2 - Add "zone" after "breathing".

Last sentence - Something appears to be omitted since only one value is shown. Should show the correct protection factors for the various types of respiratory protection discussed.

24. Page 4-4, lines 2-5:

Comment: Use of intrinsically safe instruments and equipment should be required for all situations in a potentially explosive environment, not just in the 10-20% LEL range. We would not allow a spark-producing instrument in a fuel pit even with a 0% LEL measurement, for example.

25. Page 5-3:

Add to end of first complete paragraph: "Contaminated wash waters will be disposed of as specified by the base contract monitor."

26. Page 6-1:

Para 6.0, 2nd para, lines 3 and 11 - Check to see if references to "20 CFR 1910.120" and "29 CFR 1910.20" are consistent and correct.

27. Para 6.1, line 2 - Typo: "for exposure"; line 4 - delete "U.S. Department of".

28. Page 6-2:

First word - Change "regulation" to "standard" and check for correct reference, i.e. is "29 CFR 1910.120" an interim final standard?

Line 6 - typo: "The".

Line 11 - "specific" is not capitalized.

Page 7-1, para 7.2:

Line 3 - Change "contaminated" to "contaminant".

Line 4 - Comment: The 1 ppm is not consistent with levels shown on Page 4-3 for level C protection.

29. Appendix A: Need to number Pages A-1 through A-11.



30. Page A-3 - Site 1 is shown to be FPTA #2. This is not consistent with previous page where it is FPTA #1

31. Page A-3 - Second column, delete "(PEL)" from heading.

Comment: The action level of 1 ppm should apply to specific contaminants rather than all potential contaminants to be encountered, some of which may have a PEL below 1 ppm. Ditto for 0.2 mg/M3.

Define "()N/A" in the title. The meaning is not clear.

5th column - Change "ABS" to "Abs".

7th column - Change "particules" to "particulates".

7th column - Change "Alter" to "Filter".

Site 2-Landfill, 4th column - Change "WW" to "sewage treatment".

32. Page A-4:

Site 4 and Site 6, first column - Change "Dibromids" to read "Dibromide".

Site 5, 5th column - Add "Abs, Contact".

33. Page A-7:

Last line - Change "swampy" to "swamp".

3rd column - Add Site 6 to the list of areas with potential explosive vapors and underground pipes.

34. Page A-8:

Item 6, Site 1, line 3 - Something was omitted.

Item 7, line 4 - Change "procedures" to "procedure".

35. Page A-9, Item 8, Egress:

Reference is to Section #4, but Egress is not covered in Section 4.

36. Page A-11 (last page), Item 12:

Delete "Lt Huff,"

Insert ";

Add at end: "67307, Lt Scott".

Response: Comments 17-36 incorporated into Plans.



5. Reviewer: USEPA, Region 5

A. Work Plan Comments/Responses

1. You should include as part of the domestic water supply well inventory the current depths-to-water records. Water table data from these wells should be consolidated with information from other monitoring wells installed during the ground water studies to provide current subsurface flow patterns, instead of patterns in existence at the time of well installation.

Response: Current depths-to-water records for existing wells will be researched during this project.

2. The Work Plan states that, because of the proximity of FPTA #2 to the landfill, the two will be considered as one site for the purpose of well placement. The Work Plan indicates that four wells will be installed to monitor the ground water below FPTA #2. However, based upon the information provided only two wells appear to be close enough to give groundwater data representative of that site, and neither of these wells is located in the assumed down gradient direction (southeast). Because these two sites are located over the most prolific ground water supply in the area (Silver Creek Alluvium), an additional well should be installed southeast of FPTA #2 to determine whether or not contaminants are migrating toward the South Ditch, which drains to Silver Creek. The main concern is to determine whether FPTA #2 has and is contributing to groundwater contamination. The additional well will help remove ambiguity as to the source of any contamination (landfill vs. FPTA #2) which may arise during sampling.

Response: Two wells to be installed in the area of FPTA #2 were not included in figure 5-1. These wells will be located proximate to FPTA #2 and in the assumed down gradient direction.

3. In terms of waste classification, the landfill which has waste disposed in it by the trench and fill method, can be classified as a Class 5W20, or industrial process water and waste disposal well, since it is wider (in one dimension) than it is long, and disposes of waste water treatment sludge. Therefore, the characteristic of the wastes as well as the leachate should be determined as required by 40 CFR 141.26.

Response: The sampling requirements listed in 40 CFR 141.26, "Monitoring frequency for radioactivity in community water systems", do not appear to apply to the landfill site. There has been no evidence of any type of radioactive material being disposed of at this site. Samples collected at this site will be analyzed for: Alkalinity, Common anions, Cyanide, Chlorinated Phenoxy Herbicides, Specific Conductance, pH, TDS, Temp., Metals Screen (25 metals), Lead, Petroleum Hydrocarbons, Halogenated Volatile Organics, Organo Chlorine Pesticides, Aromatic Volatile Organics, PCBs, Nonhalogenated Volatile Organics, and Semi Volatile Organics. 15 April 88 letter from William Franz, USEPA, Region 5 concurs with this protocol.



4. For the Facility 8550 spill site, private well number 17 (fig. 3-11) is so close to this site that it should be sampled initially for all petroleum hydrocarbons appearing on the Hazardous Substances List. Any recommendations regarding use of alternative drinking water supplies by nearby residents will be based upon the analytical lab results of these samples. We would be willing to review the data.

Response: Private well number 17 will be sampled during the Stage 1 RI/FS and will be analyzed for Specific Conductance, pH, TDS, Temp, Petroleum Hydrocarbons (SW3550/E418.1), Aromatic Volatile Organics (SW5030/SW8020), and Semi Volatile Organics (SW3510/SW8270).

5. For Facility 1965 Spill Site; if, as the study assumes, ground water flow in the surficial deposits is to the southeast, at least one well should be installed along that orientation from this site to provide an indication of any groundwater contamination. Figure 5-5 does not show any monitoring wells along this axis.

Response: One well will be located southeast from the Bldg 1965 spill site.



B. Quality Assurance Project Plan Comments/Responses

1. Title Page: A provision for the signature of the EPA Remedial Project Manager and the EPA Quality Assurance Officer should be made.

Response: Incorporated

2. Project Description:

a. A summary of the historical data for the site should be provided. Tables may be used for this purpose.

Response: A reference to the historical data presented in the Work Plan will be included.

b. Specific target compounds and parameters should be identified

Response: A reference to the Table of Analyses will be included.

c. Data usage statements for laboratory analyses and field measurements are missing; include data usages for all sampling parameters in this section. In addition, include photoionization detection (HNU), organic volatiles analysis (OVA), and mercury vapor measurements.

Response: Incorporated.

d. A sampling network and rationale for sampling locations must be included in this section. Summary tables of the total number of samples for each analytical parameter or group of parameters to be collected should be included as well as site maps or diagrams with sampling locations. Work Plan references are acceptable if they are specific and QAPP reviewers have access to these documents.

Response: Appropriate references to the Work Plan will be included. The Work Plan will be sent out for review at the same time as the QAPP.

e. The inclusion of a project time schedule is necessary; a bar chart is acceptable.

Response: A reference to the time schedule in the Work Plan will be included.

f. A clarification and explanation of the "fuel spill, fire training area and landfill" protocols for sampling analyses in Section 1.2.2 (p. 1-4) is necessary. These explanations should appear in section 1.8 or in a QAPP attachment.

Response: References to the above protocols have been deleted. A specific table summarizing all analyses to be accomplished is now included and referenced in appropriate sections.

3. Project Organization and Responsibility:

a. In this section, EPA responsibilities for project management

and QAPP review must be clearly delineated. EPA responsibilities for performance and system audits made by the Contract Project Management Section (CPMS) and the Central Research Lab must also be clarified.

Response: USEPA, Region 5 will be provided with copies of all Work Plans, QAPP's, and Project Reports for review and comment. Provisions will be made for any field audits which the EPA initiates.

b. In Table 4 it is indicated that at least one GC/MS method will be needed on samples for the site. Please identify the party responsible for Tentatively Identified Compound (TIC) review.

Response: The QA/QC manager of the Weston Laboratory is responsible for this initial review, with subsequent review by the USAF OEHL/TS.

c. It should be stated in Section 1.3, since it is already stated in the Laboratory QA Plan (section 4.0) that Weston is the responsible party for sample collection.

Response: The error was in section 4.0 of the QA Plan; ERM personnel will be responsible for sample collection. This has been corrected.

4. Quality Assurance Objectives:

a. Please replace references to the "current IFB" with the "current SOW".

5. Sampling Procedures:

a. An explanation of the unique sample numbering system that includes provisions for blank and replicate samples is necessary.

Response: Incorporated.

b. There is no provision for collection of extra volumes for Volatile Organic Compounds (VOC) and extractable organic Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples. Three times the normal volumes for VOCs and double the normal volume for extractable organic water samples must be collected. This applies to Section 1-10 of the QAPP as well.

Response: Provisions for Matrix Spike/Matrix Spike Duplicate samples are covered in section 1.10.2 of the QAPP.

c. The Weston Standard Operating Procedure (SOP) on page 4-2 includes an acetone rinse during decontamination. Please correct this to methanol and air drying for equipment used for organic samples as mentioned on page 2-13 of the QAPP.

Response: The acetone rinse is deleted from decon procedures. Decon procedures will include: laboratory grade detergent, drinking water ASTM Type II reagent water, pesticide-grade methanol and hexane rinses

d. Please correct the cyanide preservation procedure in Table 7, page 2-15 to a pH > 12.

Response: Incorporated.



e. Please note Region V guidelines on sampling of metals; groundwater metals samples are to be collected in the field filtered form, while surface waters, residential well waters, or other water associated with drinking water sources should be unfiltered.

Response: Incorporated

6. Sample Custody:

a. Provisions for a final evidence file, describing its contents and who has the responsibility for its maintenance must be included in the QAPP.

Response: USAF OEHL/TS will maintain a file of all information associated with the RI/FS. The administrative record for the IRP will be maintained at Scott AFB.

7. Calibration Procedures and Frequency:

a. Please discuss field calibration procedures and frequencies for the "HNU" and mercury vapor monitoring activities.

Response: Incorporated.

8. Performance and System Audits:

a. Note that Contract Project Management Section of our Central Regional Laboratory has responsibility for external system audits for the USEPA, Region V. Please make provisions for this audit in Section 1.11, page 1-37 of the QAPP.

Response: Incorporated.

9. Data Reduction, Validation and Reporting:

a. This section was omitted from the QAPP and has been confused with Section 1.13 (Specific Routing Procedures used to Assess Data Precision, Accuracy and Completeness). Add the Data Reduction, Validation and Reporting Section to the QAPP.

Response: Data Reduction, Validation and Reporting is covered in section 1.9 of the QAPP.

b. Describe the procedures used to reduce, validate and report the data under this heading.

Response: Procedures used to reduce, validate and report data are covered in section 1.9 of the QAPP.

10. Specific Routing Procedures Used to Assess Data Precision, Accuracy, and Completeness:

a. Specify how precision, accuracy and completeness are to be assessed. Examples of this QAPP element could include the use of duplicate results, spike recoveries, and valid versus total expected data.

Response: Incorporated.

11. Preventitive Maintenance:



a. Please include the "HNU" and field mercury monitoring device under Section 1.12.2

Response: Incorporated.

